CLAIMS

What is claimed is:

1.   A method for interconnecting a first device and a second device in a network, comprising the step of:

connecting the first device and the second device to a plurality of interfaces; and

emulating a single high-speed interface with the plurality of interfaces.

2.   The method of Claim 1, further comprising the step of selecting one of the plurality of interfaces to send a packet of data.

3.   The method of Claim 2, wherein the step of selecting one of the plurality of interfaces to send the packet of data comprises utilizing state information in the first device.

4.   The method of Claim 2, wherein the step of selecting one of the plurality of interfaces to send the packet of data comprises utilizing address information in the packet of data.

5.   The method of Claim 1, further comprising the step of transmitting a first packet of data on only one of the plurality of interfaces.

6.   A method for creating a multi-interface connection that connects a first device and a second device, comprising the steps of:

assigning a first identifier to a first interface and a second interface at the first device; and

5   identifying a path between the first device to the second device with the first

6   identifier.

1   7.   The method of Claim 6, wherein the step of assigning the first identifier

2   to the first interface and the second interface comprises assigning a media access control

3   (MAC) address.

1   8.   The method of Claim 6, wherein the step of assigning the first identifier

2   to the first interface and the second interface comprises assigning an Internet Protocol

3   (IP) address.

1   9.   The method of Claim 6, wherein the step of assigning the first identifier

2   to the first interface and the second interface comprises assigning a grouping identifier.

1   10.   The method of Claim 6, further comprising the step of allocating data to

2   be transmitted on the first interface and the second interface such that data traffic on the

3   first interface and the second interface is approximately the same.

1   11.   The method of Claim 10, wherein the step of allocating data to be

2   transmitted on the first interface and the second interface, comprises:

3   checking an output queue of the first interface and an output queue of the second

4   interface;

5   transmitting the data on the first interface when the output queue of the second

6   interface is fuller than the output queue of the first interface and when previous data sent

7   on the first interface is no longer on the first interface; and

8   transmitting the data on the second interface when the output queue of the first

9   interface is fuller than the output queue of the second interface and when previous data

10   sent on the second interface is no longer on the second interface.

1   12.   The method of Claim 6, further comprising the step of selecting one of

2   the first interface and the second interface to send a packet of data based on address

3   information in the packet of data.

1   13.   The method of Claim 6, further comprising transmitting a first packet of

2   data on only one of the first interface and the second interface.

1   14.   A method for creating a multi-interface connection, comprising:

2   connecting a first device to a plurality of interfaces;

3   emulating a single high-speed interface with the plurality of interfaces.

1   15.   The method of Claim 14, further comprising the step of selecting one of

2   the plurality of interfaces to send a packet of data.

1   16.   The method of Claim 15, wherein the step of selecting one of the

2   plurality of interfaces to send the packet of data comprises utilizing state information in

3   the first device.

1   17.   The method of Claim 15, wherein the step of selecting one of the

2   plurality of interfaces to send the packet of data comprises utilizing address information

3   in the packet of data.

1   18.   The method of Claim 14, further comprising the step of transmitting a

2   first packet of data on only one of the plurality of interfaces.

1   19.   A network, comprising:

2   a first device;

3   a second device;

4   a first interface coupled to the first device and the second device;

5   a second interface coupled to the first device and the second device, wherein the

6   first interface and the second interface emulate a single high speed interface.

1   20.   The network of Claim 19, wherein the first interface and the second

2   interface are homogeneous.

1   21.   The network of Claim 19, wherein the first device comprises a load

2   balancing unit that allocates data to be transmitted on the first interface and the second

3   interface such that data traffic on the first interface and the second interface is

4   approximately the same.

1   22.   The network of Claim 19, wherein the first device is an end-node.

1   23.   The network of Claim 19, wherein the second device is a switch.

1   24.   A network, comprising:

2   a first device;

3   a second device;

4   a first interface coupled to the first device and the second device;

19

5   a second interface coupled to the first device and the second device, wherein the

6   first interface and the second interface are assigned an identifier that identifies a path

7   between the first device and the second device.

1   25.   The network of Claim 24, wherein the identifier is an Internet Protocol

2   (IP) address.

1   26.   The network of Claim 24, wherein the identifier is a media access control

2   (MAC) address.

1   27.   The network of Claim 24, wherein the identifier is a grouping identifier.

1   28.   The network of Claim 24, wherein the first interface and the second

2   interface are homogeneous.

1   29.   The network of Claim 24, wherein the first device comprises a load

2   balancing unit that allocates data to be transmitted on the first interface and the second

3   interface such that data traffic on the first interface and the second interface is

4   approximately the same.

1   30.   The network of Claim 24, wherein the first device is an end-node.

1   31.   The network of Claim 24, wherein the second device is a switch.

32.   A network device, comprising:

a first port that connects to a first interface;

3   a second port that connects to a second interface;

4   a trunking pseudo driver, coupled to the first port and the second port, that

5   allows the first interface and second interface to emulate a single high-speed device.

1   33.   The network device of Claim 32, wherein the trunking pseudo driver

2   comprises a load balancing unit that selects one of the first and second interfaces to

3   transmit a packet of data.

1   34.   The network device of Claim 32, wherein the trunking pseudo driver

2   comprises an identification unit that assigns a first identifier to the first interface and the

3   second interface that identifies a path between the first and the second device.

1   35.   The network device of Claim 32, wherein the first and second interface

2   are homogeneous.

1   36.   The network device of Claim 32, wherein the network device is an end-

2   node.

1   37.   The network device of Claim 32, wherein the network device is a switch.

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